

REMARKS

This application has been reviewed in light of the FINAL REJECTION mailed October 19, 2007. Reconsideration of this application in view of the below remarks is respectfully requested. Claims 1 – 5, 9 – 15, 19 – 20 and 22 – 23 are pending in the application with Claims 11, 19 and 20 having been previously withdrawn. Of the claims elected for prosecution at this time, Claims 1, 9, 10 and 20 being in independent form.

By the present amendment, Claim 1 is amended to correct a minor inconsistency in terminology. Specifically, the phrase “said layout features” has been amended to recite: “said color layout features”, thus maintaining consistent terminology throughout the claims. As the amendment to Claim 1 is merely to correct a minor error and does not introduce new issue or subject matter into the claims, Applicants respectfully submit that a new search would not be necessitated by the amendment.

Initially, Applicants have identified an error in the present Office Action regarding the withdrawn claims. Specifically, Claims 6 – 8, 11 and 16 – 21 are listed as withdrawn from consideration. However, Claims 6 – 8 and 16 – 18 were canceled in a preliminary amendment dated November 29, 2004 and prior to issuance of the Restriction Requirement dated April 11, 2007.

The inclusion of the canceled claims is present in the restriction requirement, leading Applicants to believe that perhaps the preliminary amendment may not have been fully considered. Therefore, in order to correct the record, a copy of the preliminary amendment is enclosed herewith for reference.

I. Rejection of Claims 1 – 3 and 9 – 10 Under 35 U.S.C. § 102(b)

Claims 1 – 3 and 9 – 10 are rejected over 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 6,052,492 issued to Bruckhaus.

The Examiner contends that Bruckhaus discloses an image description system (FIG.1 – 3) comprising a feature extracting unit (FIG. 2, 215) extracting color layout features from respective frames of an image sequence; a representative feature calculating unit (FIG. 2, 230) calculating a representative color layout feature representative of the image sequence from a group of color layout features extracted by the feature extracting unit. (Sec: col. 4, lines 35 – 56, col. 8, lines 24-41 and col. 10, lines 25-46).

Bruckhaus discloses identifying various features in an image, such as a basketball, shirts, etc. Even though color information may play a part in the identification process, Bruckhaus does not, however use this color information to calculate a representative color layout feature representative of the image sequence from a group of layout features of all frames extracted. Rather, Bruckhaus discloses that the unit extractor extracts all the units, i.e., an integral set of pixels representing a single physical object in a frame. Of these extracted units a plurality of the most predominant units are composited into a representative image. (Sec: FIG. 4 – 6b).

Regardless of whether Bruckhaus discloses attributes such as color brightness and motion, no where in Bruckhaus is a representative feature calculating unit disclosed for calculating a representative color layout feature representative of said image sequence from a group of said layout features of all frames extracted by said feature extracting unit.

Color layout feature within the context of the present invention has a specific meaning, which must be considered when asserting that a prior art reference discloses such a feature. Regarding the meaning of color layout feature within this context, Applicants point to FIG. 6 and

FIG. 7 for clear examples of color layout values. These color layout values are examples of color layout features in the present invention, and thus provide a definition of the term “color layout features” as used throughout the disclosure and claims. Also, as shown in FIG. 6 and 7, a representative color layout feature representative of an image sequence from a group of layout features of all frames in the image sequence are shown. (See: Total and Average rows in FIG. 6; and Median row in FIG. 7). It is evident from Applicants’ disclosure that the color layout features are color component values, such as luminance and color difference.

Moreover, color layout features represent rough distribution (layout) of colors in an image. Since the color distribution reflects information of an object in the image, the color layout feature is considered to reflect rough placement information of the object displayed in the image.

Usually, a video sequence includes successive scenes in which the placements of an object remain the same or nearly so from one scene to another. Consequently, the placement information of the object in the video sequence can be used as a representation of the video sequence. With regard to different video sequences, respective objects usually differ from one another and thus the placements of the respective objects differ as well. Therefore, representative placement information of the object (representative color layout feature) of a video sequence can be an effective feature for distinguishing one video sequence from other video sequences. Such an advantage is neither disclosed nor suggested in the cited prior art references.

Further, the color layout feature of each frame can be described very compactly. Therefore, the color layout feature provides higher retrieval speed as well as smaller hardware load over the representative features disclosed in the cited prior art references.

Unlike Bruckhaus, which generates a representative image from representative shapes in the frames, the present invention generates a representative color layout feature, such as a total

color feature value, average color feature value or a median color feature value. Rather than being a combination of shapes representing the image sequence, the representative color layout feature of the present invention is a single color layout feature representative of the color layout features in the image sequence.

It is well-settled by the Courts that “[A]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company, et al., 730 F.2d 1452, 221 USPQ 481 (Fed. Cir., 1984).

Therefore, as demonstrated above, because Bruckhaus does not disclose each and every element recited in the present claims, Applicants respectfully submit that the rejection has been obviated. Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 1 – 3 and 9 – 10 under 35 U.S.C. § 102(b).

II. Rejection of Claims 12 – 15, 22 and 23 Under 35 U.S.C. § 102(e)

Claims 12 – 15, 22 and 23 are rejected by the Examiner under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 6,400,890 issued to Nagasaka et al.

As with Bruckhaus, Nagasaka et al. fails to disclose calculating a representative color layout feature representative of the image sequence from a group of color layout features of all frames extracted. Rather, Nagasaka discloses a frame feature extractor that extracts a feature from each frame and assigns the extracted feature to represent the frame from which it was extracted. Thus, the extracted feature is not calculated to represent an image sequence. In addition, the features that are extracted are not color layout features, as described above and defined within Applicants’ disclosure; rather as described in col. 14, line 37 – col. 15, line 30,

these features are physical objects, such as a person, camera work and special effects. No mention is made of color layout features in Nagasaka et al.

Therefore, as demonstrated above, because Nagasaka et al. does not disclose each and every element recited in the present claims, Applicants respectfully submit that the rejection has been obviated. Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 12 – 15, 22 and 23 under 35 U.S.C. § 102(e).

III. Rejection of Claims 4 and 5 Under 35 U.S.C. § 103(a)

Claims 4 and 5 are rejected by the Examiner under 35 U.S.C. § 103(a) as allegedly obvious over Bruckhaus in view of Nagasaka et al.


However, as discussed above, neither reference discloses calculating a representative color layout feature representative of the image sequence from a group of color layout features of all frames extracted. Therefore, the references, taken alone or in any proper combination fail to disclose the features recited in Claim 1 from which Claims 4 and 5 depend.

CONCLUSIONS

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1 – 5, 9, 10, 12 – 15 and 22 – 23 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at the number indicated below.

Respectfully submitted,



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